

WHAT IS CLAIMED IS:

1. An adapter clamp configured to be received on the top of an aerosol can suitable for enabling a delivery system to be fitted to the top of the aerosol can, the adapter clamp comprising:

a pair of body members oriented in a side-by-side relationship such that medial faces of the clamp members are in a facing relationship, each of said members having an arcuate cutout in the medial face, the arcuate cutouts combining to form an aperture through which the delivery system contacts the aerosol can, wherein each body member has an arcuate neck with a radially protruding toe extending from a bottom surface thereof in registration with the arcuate cutout and configured to be received in a recess in the top of the aerosol can;

at least one connector slidably joining the body members such that the members are adapted to move between a spread configuration wherein the body members have a gap therebetween having a selected width and a compressed configuration wherein the members substantially abut each other, wherein the aperture has a circular shape when the body members are in the spread configuration for receiving an adapter of the delivery system; and

at least one spring member configured to push the body members apart thereby biasing the members to the spread configuration;

wherein when the body members are squeezed together to the compressed configuration against spring pressure, the toes can be inserted past a rim partially overhanging said recess in the aerosol can, and when the body members are returned to the spread configuration, the toes engage the overhanging rim to clamp the adapter clamp to the aerosol can.

2. An adapter clamp as claimed in claim 1 wherein two connectors join the body member, wherein the connectors are located on opposite sides of the aperture.

3. An adapter clamp as claimed in claim 1 wherein faces of the arcuate cutout are threaded.

4. An adapter clamp as claimed in claim 1 wherein two springs bias the body members in a spread condition, wherein the springs are located on opposite sides of the aperture

5. An adapter clamp as claimed in claim 1 wherein opposite ends of the neck and the toe on each body member are truncated so that the ends can fit between the overhanging rim of the can.

6. An adapter clamp as claimed in claim 5 wherein toes have a truncated length that is between about 50% and about 80% of the diameter across the toes when the body members are in the spread configuration.

7. An adapter clamp as claimed in claim 1 wherein the connector comprises a tie rod having a groove in at least one end, said groove receiving a clip for contacting the body member to secure the tie rod in the body members.

8. An adapter clamp as claimed in claim 1 wherein the gap between the body members in the spread configuration is between about 0.10 inches and about 0.15 inches.

9. An adapter clamp as claimed in claim 1 wherein at least one of the body members further comprises an arcuate wall extending from an upper surface thereof in registration with and radially outward from the arcuate cutout to properly align the adapter with the aperture.

10. An aerosol application system comprising:  
an aerosol can having a valve comprising a pedestal and a mounting cup forming an annular recess around said pedestal and a rim overhanging a portion of said recess;  
a delivery system comprising an adapter having a threaded portion;  
an adapter clamp for connecting the delivery system to the aerosol can comprising:  
a pair of body members oriented in a side-by-side relationship such that medial faces of the clamp members are in a facing relationship, each of said members having an arcuate cutout in the medial face, the arcuate cutouts combining to form an aperture through which the delivery system contacts the aerosol can, wherein each body member

has an arcuate neck with a radially protruding toe extending from a bottom surface thereof in registration with the arcuate cutout and configured to be received in the recess in the aerosol can;

at least one connector slidably joining the body members such that the members are adapted to move between a spread configuration wherein the body members have a gap therebetween having a selected width and a compressed configuration wherein the members substantially abut each other, wherein the aperture has a circular shape when the body members are in the spread configuration for receiving the threaded portion of the adapter; and

at least one spring member configured to push the body members apart thereby biasing the members to the spread configuration;

wherein when the body members are squeezed together in the compressed configuration against spring pressure, the toes can be inserted past the rim overhanging said recess, and when the body members are returned to the spread configuration, the toes engage the overhanging rim to clamp the adapter clamp to the aerosol can.

11. The aerosol application assembly of claim 10 wherein the delivery system comprises a flexible hose and an adapter comprising a circular threaded portion configured be threaded into the aperture.

12. The aerosol application assembly of claim 10 wherein two connectors join the body member, wherein the connectors are located on opposite sides of the aperture.

13. The aerosol application assembly of claim 10 wherein faces of the arcuate cutout are threaded.

14. The aerosol application assembly of claim 10 wherein two springs bias the body members in a spread condition, wherein the springs are located on opposite sides of the aperture

15. The aerosol application assembly of claim 10 wherein opposite ends of the neck and the toe on each body member are truncated so that the ends can fit between overhanging rim of the can.

16. The aerosol application assembly of claim 15 wherein toes have a truncated length that is between about 50% and about 80% of the diameter of the toes when the body members are in the spread configuration.

17. The aerosol application assembly of claim 10 wherein the connector comprises a tie rod having a groove in at least one end, said groove receiving a clip for contacting the body member to secure the tie rod in the body members.

18. The aerosol application assembly of claim 10 wherein the gap between the body members is between about 0.10 inches and about 0.15 inches when the body members are in the spread configuration.

19. The aerosol application assembly of claim 10 wherein at least one of the body members further comprises an arcuate wall extending from an upper surface thereof in registration with and radially outward from the arcuate cutout to properly align the adapter with the aperture.